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A NEW CARIBBEAN MURICID MOLLUSK, TYPHIS PUERTORICENSIS

By GERMAINE L. WARMKE, Institute of Marine Biology, University of Puerto Rico, Mayagüez, Puerto Rico

Recent collections around Puerto Rico have brought to light many interesting and rare mollusks. The total for the island is now well over the 858 species listed in 1961 (Warmke & Abbott) and increases with each dredging expedition.

Recently, the first specimens of the muricid genus *Typhis* were collected by dredging from 33 to 50 fathoms off the west coast of Puerto Rico. These represent a species which is described herein as new.

Family Muricidae, subfamily Typhinae Genus Typhis Montfort, 1810, subgenus Talityphis Jousseaume, 1882

Typhis (Talityphis) puertoricensis, new species.

Plate 1, figs. 1-4

Shell medium-sized, strong, rosy brown when young; later whorls whitish with a brownish-pink cast. Nucleus with two smooth and glassy whorls, followed by 5 gradually increasing whorls each bearing 4 cylindrical tubes alternating with the 4 rounded varices. Varices terminating in thin, recurved hooks. Tubes placed near the preceeding varix, long and backwardpointing before breaking (Plate 1, fig. 2). Whorls parted by an increasing deep suture which is irregularly fluted by upper ends of recurved varices and bases of tubes. Surface sculptured with weak spiral cords that are more prominent on the varices, 6 being visible on the outer lip. Aperture small, oval, smooth internally; varix at outer lip greatly expanded and of nearly uniform width throughout. Suture line between outer lip and unsculptured pad above aperture making a 45-degree angle with the sculpture of the outer lip (Plate 1, fig. 3). Anterior canal long, slender, closed in front; pillar with remnants of three antecedent canals. Operculum unguiculate, with an apical nucleus.

Animal small, light-cream colored, with scattered yellow and

opaque white spots. Foot broad; tentacles long and narrow; eyes tiny black specks at the outer upper half of tentacles, which become thin filaments above the eyes.¹

Holotype: Stanford University Paleo. Type Coll. no. 9722. Adult, length 17.2 mm.; greatest width 10.0 mm.; aperture 4.0 mm.; longest tube 4.5 mm.; dredged alive in 33 fathoms off Punta Cadena, North of Mayagüez, on the west coast of Puerto Rico, from the vessel "Shimada", May 10, 1963.

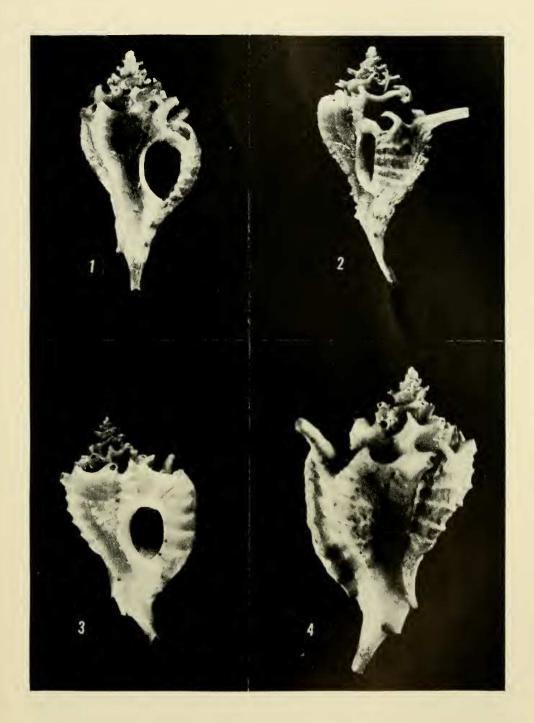
Paratype: U. S. National Museum No. 635750. Young, length 13.7 mm.; greatest width 7.0 mm.; aperture 4.0 mm.; longest tube 2.9 mm.; dredged alive in approximately 50 fathoms off Punta Cadena, Puerto Rico, from the vessel "Carite", September 14, 1963, bottom sandy-mud and dead shells.

Remarks: Aguayo and Jaume (1947) listed 4 recent species of Typhis from the Caribbean. The species and their distributions are: Typhis (Pterotyphis) fordi Pilsbry, 1943, Florida to Cuba; Typhis (Talityphis) expansus Sowerby, 1874, Santo Domingo; Typhis (Siphonochelus) longicornis Dall, 1888, Florida to the Antilles (127-410 fathoms); Typhis (Tripterotyphis) cancellatus Sowerby, 1841, Antilles. T. cancellatus also was listed from the Caribbean coast of Panama by Olsson and McGinty (1958).

The new species belongs to the subgenus *Talityphis* (adopted from Keen, 1944), which is characterized by the presence of 4 tubes per whorl, the tubes being free and nearer the preceding varix, and the lip of varix of nearly uniform width throughout. Of the species previously reported from the Caribbean, only *Typhis expansus* belongs to the subgenus *Talityphis*.

Diagnosis: Compared to T. expansus, the new species is proportionately more slender; the varices are rounded in T. puertoricensis (fig. 4), whereas in T. expansus the varices are thin and laminar. Another difference is the position of the suture line between the outer varix and the unsculptured pad above the aperture. In T. expansus this suture lies at right angles to the top of the aperture; in T. puertoricensis the suture makes a 45-degree angle with the sculpture of the outer lip (fig. 3); the

¹ The adult specimen remained alive in an aquarium for several weeks. My observations on the morphology of its foot, tentacles and eyes are different from those that Baker (1895:181) reported for the genus: ". . . foot long and narrow, tentacles thick and broad; eyes situated at their base." Perhaps Baker's observations were made from preserved material.



Typhis puertoricensis Warmke. Figs. 1 & 2, paratype, length 13.7 mm. 3 & 4, holotype, adult. 4, enlarged to show nuclear whorls and shapes of varices.